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IHY: Meteor astronomy and the New Independent States (NIS) of the former Soviet Union

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Abstract

The purpose: to emphasize, that there are some specific features of the development of science in the New Independent States (NIS) of the Former Soviet Union. These features demand enhanced attention of the organizers of the IHY. It is necessary to create effective mechanisms for the stimulation of the connection to world science of the dormant part of fundamental scientific knowledge of these countries, which has been saved up for fifty of years. Probably, the IHY is the last opportunity of rescuing the dormant part of this knowledge from full oblivion. The method adopted is to discuss and analyse the general tendencies in science in the NIS by reference to individual cases, in particular for meteor astronomy. Results: The features and history of the development of meteor astronomy during the existence of the Soviet Union and the subsequent period give a key to understanding of the problem. Meteor astronomy can be assumed to be a young science. It is an example of a cross-disciplinary science. It is an example of a science having a sharp rise, due to the project of the IGY and to subsequent geophysical projects. Meteor astronomy is a science directly connected with the launching of the first space satellite of the Earth and the evaluation of problems of meteoroid danger to space missions. Commission 22 (Division III) of the IAU coordinated the development of meteor astronomy during the IGY. The known Soviet researcher of meteors V. Fedynskiy headed this Commission during four years since 1958. In the USSR numerous meteor centres were created and activated. The general management was concentrated in Moscow. Despite the close interaction under global projects of the Soviet Union with other countries, there still existed a language barrier. The language barrier, together with other reasons, has led to the creation in the USSR of a powerful meteor science, but only in the Russian language. After the disintegration of the Soviet Union, the meteor centres have remained, but without ordinary central management. The scientific results have remained but as an isolated, inaccessible science published in English. Conclusion: Reunification of the scientific achievements of the last few years in the NIS with international science should become the task of the IHY. Revival of the activity of the some of the centres will be useful. © 2007 International Astronomical Union.

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Keywords

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